

ALASKA STATE LEGISLATURE
SENATE RESOURCES STANDING COMMITTEE

February 25, 2008

3:44 p.m.

MEMBERS PRESENT

Senator Bert Stedman, Vice Chair
Senator Lyda Green
Senator Gary Stevens
Senator Bill Wielechowski
Senator Lesil McGuire

MEMBERS ABSENT

Senator Charlie Huggins, Chair
Senator Thomas Wagoner

OTHER LEGISLATORS PRESENT

Senator Joe Thomas

COMMITTEE CALENDAR

HOUSE BILL NO. 315

"An Act extending the termination date of the Big Game Commercial Services Board; and providing for an effective date."

MOVED HB 315 OUT OF COMMITTEE

Alaska Natural Gas Development Authority Presentation by Harold Heinze, Executive Director

PREVIOUS COMMITTEE ACTION

BILL: HB 315

SHORT TITLE: EXTEND BIG GAME COMMERCIAL SERVICES BOARD

SPONSOR(s): RULES BY REQUEST OF LEG BUDGET & AUDIT

01/15/08	(H)	READ THE FIRST TIME - REFERRALS
01/15/08	(H)	L&C, FIN
01/28/08	(H)	L&C AT 3:00 PM CAPITOL 17
01/28/08	(H)	Moved Out of Committee
01/28/08	(H)	MINUTE(L&C)
01/31/08	(H)	L&C RPT 6DP 1NR
01/31/08	(H)	DP: GARDNER, LEDOUX, BUCH, RAMRAS, GATTO, OLSON
01/31/08	(H)	NR: NEUMAN

02/05/08 (H) FIN AT 1:30 PM HOUSE FINANCE 519
02/05/08 (H) Moved Out of Committee
02/05/08 (H) MINUTE(FIN)
02/06/08 (H) FIN RPT 3DP 5NR
02/06/08 (H) DP: KELLY, JOULE, THOMAS
02/06/08 (H) NR: CRAWFORD, HAWKER, STOLTZE, MEYER,
CHENAULT
02/11/08 (H) TRANSMITTED TO (S)
02/11/08 (H) VERSION: HB 315
02/13/08 (S) READ THE FIRST TIME - REFERRALS
02/13/08 (S) RES, FIN
02/20/08 (S) RES AT 3:30 PM BUTROVICH 205
02/20/08 (S) Heard & Held
02/20/08 (S) MINUTE(RES)
02/25/08 (S) RES AT 3:30 PM BUTROVICH 205

WITNESS REGISTER

HAROLD HEINZE, Executive Director
Alaska Natural Gas Development Authority (ANGDA)
Anchorage AK

POSITION STATEMENT: Gave presentation for the Alaska Natural Gas Development Authority.

ACTION NARRATIVE

VICE CHAIR BERT STEDMAN called the Senate Resources Standing Committee meeting to order at [3:44:59 PM](#). Present at the call to order were Senators Green, Stevens, Wielechowski and Stedman.

HB 315-EXTEND BIG GAME COMMERCIAL SERVICES BOARD

[3:46:01 PM](#)

VICE CHAIR BERT STEDMAN announced HB 315 to be up for consideration.

SENATOR GREEN moved to report HB 315 from committee with individual recommendations and accompanying fiscal notes. There were no objections and it was so ordered.

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Alaska Natural Gas Development Authority (ANGDA) Presentation

[3:47:44 PM](#)

HAROLD HEINZE, Executive Director, Alaska Natural Gas Development Authority (ANGDA) said the authority is a public corporation of the State of Alaska. It exists under statute and

was passed by the initiative process. It is under the control of a seven-member public board and has six members; Scott Hayworth is the acting chairman. It employs about six or seven individual consultants on a part time basis and has hired several dozen contractors, almost all Alaskan, since it was formed in 2003.

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SENATOR MCGUIRE joined the committee.

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MR. HEINZE said ANGDA applied for a license under the Alaska Gas Line Inducement Act (AGIA) and he wanted first to comment on that process; secondly he wanted to discuss other things that relate to it.

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MR. HEINZE said he would first talk about a "spur line" and ANGDA's interest in getting North Slope gas to market in a way that benefits Alaskans. Most recently it has focused entirely on making the connection between the instate resource and the individual Alaskan consumer through the electric utilities and the gas transmission companies. The key element in all that is a gas transmission system that would run from a major project, either highway or an LNG project, and connect into the Cook Inlet area where there is extensive use of Cook Inlet gas.

Second, as part of his project thinking, he said he considered numerous takeoff points along the way for gas users, wholesale propane facilities et cetera. He also tried to look at people who might want to put gas on the pipeline system after discovering it. Someone has to speak for them at some point in the process. He illustrated a spur line system in his presentation.

MR. HEINZE said ANGDA's AGIA application described an Alaska gas market that used 250 Mmcf/day for both heating and electric generation. Propane is an ideal fuel in the rural setting and he said North Slope gas is rich in it - far more than the 10,000 barrels/day his chart indicated. In addition, he said, Alaska has always looked at both Valdez as an LNG port and Cook Inlet as an LNG and industrial site. Both are very important to Alaska in the long run and so ANGDA's approach goes through Glennallen and keeps all of those options open even if they are not part of the initial system. (The slide illustrated his view of the propane distribution system in Alaska.)

He said every compressor station would become a source of propane because it gets extracted there anyhow and propane could be trucked from there or sent down the Yukon River. Once it got to tidewater, it could be moved all up and down the coast in barges.

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MR. HEINZE said ANGDA's application was limited in scope and focused only on the instate connection to a highway pipeline they proposed would start at Delta Junction, then run to Glennallen, to Palmer and then to Beluga. It was sized entirely for just residential heat and electrical load. It was not on the same scale as the "big project," but would cost over \$1 billion. The people who would be obligated to pay for it would be the ones with meters hanging on their houses.

The second part of ANGDA's application conceived of a major project going to Valdez; it was a shorter amount of pipeline, a lower tariff and a lower cost. The two tariff numbers when coupled with a realistic estimate of the tariff in a big pipe would result in a transportation cost from the North Slope to Cook Inlet that would look very similar to the transportation charge from the North Slope to Alberta or Chicago. Again, he said the volume assumption is just for the residential load and that any export or industrial loads would drop the tariffs significantly.

VICE-CHAIR STEDMAN asked him to comment on the capital costs for a scenario where another entity built the larger 48-inch line to Alberta or Chicago and ANGDA built a bullet line to Beluga.

MR. HEINZE speculated that from Delta Junction (on the chart of their proposed spur line system) a 48-inch pipe would probably be less than \$1 from the North Slope to that point.

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VICE-CHAIR STEDMAN asked if the spur line coming out of Delta Junction were backed by the state, would it still cost \$1 billion to build.

MR. HEINZE answered their estimate is \$1.25 billion for a spur line from Delta Junction into the Cook Inlet area.

SENATOR WIELECHOWSKI asked at what point would it not make sense to have a line to Alberta, because gas is used for instate needs and the pipe might not be full.

MR. HEINZE answered they had looked at that concept and a few years ago a 2 Bcf/day LNG project was economic, feasible and competitive, but they decided also that it would be a really big project with a lot of moving parts. They then started focusing on getting gas to Alaskans. He referenced a letter to the governor that was written over a year ago in response to a similar question. They basically concluded at that time that the economics of a spur line coming off a big pipe would be difficult, but very workable, for just residential customers. They also found that for a small project that would go all the way to the North Slope, an industrial user or exporter would have to be added. The right balance would just have to be found.

VICE-CHAIR STEDMAN noted Senator Thomas was in attendance.

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MR. HEINZE said 24-inch sized pipe is very available in the world steel market and can be made by just about any steel mill. All of the equipment exists for construction and all they would have to do is gather it up; the 1,000-member workforce with the skills needed already exists within Alaska. The engineering design and permitting would need to be done to get ready for the construction phase. He said that ANGDA had already obtained a conditional right-of-way from the State of Alaska for the Glennallen to Palmer leg and visualizes coming down from Delta Junction to Glennallen in close proximity to the Trans-Alaska Pipeline (TAPS). Two rights-of-way already exist from Palmer to Beluga. He envisioned three years to field construction and two to three years for this kind of a pipeline.

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MR. HEINZE said ANGDA's application contained a full set of legal and contractual documents to make the commitments for the gas necessary to start building the pipeline. They also developed a cost of service model on an Excel spreadsheet. He added that ANGDA did not survive the completeness review because they didn't go to the North Slope; they hoped one of the applicants would refer to them directly and by that reference to be included in the process.

MR. HEINZE emphasized that Alaskans all over needs to have some sort of crack at getting this energy and stated that everybody is in some sort of difficulty energy-wise.

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SENATOR WIELECHOWSKI asked if he was successful in getting commitments for the propane portion of the project.

MR. HEINZE answered they had developed a propane demonstration project down the Yukon River. The concept would be to truck propane since there is no pipeline from the North Slope down to the Yukon River and the City of Tanana is proceeding on that project. ANGDA awarded a contract to a project developer to work for them. Getting the propane has been one of the on-again off-again easy-difficult parts. At first it was pretty easy because propane is made on the North Slope as part of the production facilities and it is used to chill the gas. But it turns out that that supply is not available for this project, so they will have to find other opportunities or ask the state if it wants to take some royalty propane in-kind.

SENATOR WIELECHOWSKI asked why the change of opinion on the propane supply.

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MR. HEINZE replied just that it's being fully utilized already. He stressed in slide 11 that it's not enough to say they have five off-take points in Alaska. To make it work, you have to have an ability to make a physical connection and a contract; you need financial commitments and regulatory approvals. This would take about three years.

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He said Cook Inlet clearly has alternatives, but every time he has done an evaluation of them, all of the scenarios that use gas or more heavily rely on gas always come out cheaper to the consumer. It's because a huge investment in gas infrastructure already exists there and any other project would require infrastructure that the consumer would have to pay for. They found little difference in projects between locally found gas, gas brought in from the North Slope and imported LNG from Indonesia. So, he concluded, the power is in using the existing infrastructure, not exactly what the gas source is.

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He reviewed Slide 13, which was a chart of the variance in daily demand over a one-year period. The peaks were in the middle of the winter when a lot of gas is burned for heat and electricity. In the summer the heating load almost goes away and that sharp up and down is the challenge to the current system. It's hard to sustain producing wells and develop the economics of drilling wells in the summer; and the winter demands strain the system

the other way. The advantage of the Kenai LNG plant and the Agrium plant, however, is that they can be turned off or down in the winter so supply could go to residents.

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MR. HEINZE next shifted gears to the Plan B idea and summarized that everything he has covered is compatible with the AGIA process and with any proposal he has seen from anybody at this point. On the other side of the issue he has the sense of two discomforts with where the state is on the gas issue right now. One is the issue of timing and the need for some solution for instate needs; it's clear that even the most aggressive of the other plans is at least a decade out and realistically more than that.

It also becomes an issue of probability - the bigger more complex projects are, the more there is an opportunity for things to go awry. He felt that sense of discomfort over these two issues in the legislature, as well. He said he would present the rest of his talk in that spirit emphasizing that he didn't have an answer, but he had some ideas.

One idea is that the situation is different today than it was a couple of years ago. The opportunities are different on the North Slope. Clearly Anadarko is already looking for gas in the foothills; two years ago that opportunity did not exist. They could find a field of 3 Tcf to 5 Tcf. That provides the basis to anchor a small project and an explorer who has found gas has every motive to monetize it as quickly as possible. They have tremendous incentives to dedicate that gas to the instate market with the recently-passed tax incents that give preference to gas marketed in Alaska by dropping the severance tax from 25 percent to 5 percent. Also not lost on the Foothills opportunity, is that the partners to Anadarko are BG Group and PetroCanada. BG Group has told this committee that if they had gas in Alaska, they would like to monetize it through an LNG project out of Valdez.

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The second item on his chart was Point Thomson and he said that now, as opposed to two years ago, he could say pretty confidently that within one to two years, it would be under active development. And if you can build a small single high-pressure gas line coming off the North Slope, you could build one from Point Thomson and run both the condensate and the gas into that kind of a pipeline system. It would look very different in terms of development than what is on the table.

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He observed if there was a high pressure gas line coming off the North Slope to an instate system, it would be logical to extract the ethane-propane-butane that is brought to the surface every day with the 8 Bcf gas that is reinjected. One could continue re-injecting the gas and take the more valuable ethane, propane and butane to market. That is good conservation, and a good argument could be made that if you didn't do that and had the opportunity, that would constitute waste as defined in Alaska statutes. He added that the state is also a royalty gas owner and at some point it has an obligation to assure that gas is available in the state if needed. Also, having that gas as a back-stop is key to reaching a commercial transaction with other parties.

Finally, Mr. Heinze put forth that the process of converting gas to liquids costs a lot of money, but the virtue of it is that you get an extraordinarily high-quality product. If the first thing you do is put it in the oil line, you lose cleanliness, but if it is put in a high pressure gasline, it maintains its identity as a very high quality product.

So, Mr. Heinze summarized:

Well, maybe with a little fresh thinking, we can go up north and find something other than Prudhoe Bay, find something other than the same three producers that we constantly look to to solve this problem and maybe we can find some other ways to advance the project.

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He referred to Slides 15 and 16 to illustrate a project based on new North Slope gas supplies. He concluded this basin-opening project would be Plan B.

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MR. HEINZE argued there is an expectation out there "that we do something with the North Slope gas that helps the economy, creates jobs and makes energy supplies more readily available and more reasonably priced." He next presented a conceptual slide that he borrowed from a Society of Petroleum Engineers article on the different concepts behind moving gas and remarked it's not a simple world of just pipelines versus LNG, but rather of compressed natural gas, petrochemicals, gas-to-liquids and making the gas into electricity and moving the electrons (this could work in the Nenana Basin).

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Slide 18 illustrated ANGDA's game plan which is to:

1. continue to work with all project sponsor under AGIA
2. sponsor open season informational workshops
3. conduct high-priority field work along instate connector pipeline alignments
4. continue development of major elements of design, logistics and construction
5. secure financing with public private utility and industrial partners.

MR. HEINZE said ANGDA would continue to search for commercial entities that would be capable of taking over the project that ANGDA started. He thought a number companies would be interested if they thought a gas project was actually going to happen, because an instate system would fit their strategic direction in the longer term. He concluded by thanking the committee for giving him this opportunity.

VICE-CHAIR STEDMAN thanked him, too, for updating the committee on this project and adjourned the meeting at [4:38:35 PM](#).